

## Up-converting reporters for biological and other assays using laser excitation techniques

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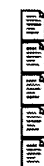
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**Cited documents:**



EP0476556

US4100416

US4724217

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US5132242

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### Abstract of **EP0723146**

The invention provides methods, compositions, and apparatus for performing sensitive detection of analytes, such as biological macromolecules and other analytes, by labelling a probe molecule with an up-converting label. The up-converting label absorbs radiation from an illumination source and emits radiation at one or more higher frequencies, providing enhanced signal-to-noise ratio and the essential elimination of background sample autofluorescence. The methods, compositions, and apparatus are suitable for the sensitive detection of multiple analytes and for various clinical environment sampling techniques.

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